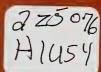
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Tourism as a Rural Economic Development Tool: An Exploration of the Literature

Martha Frederick



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Tourism as a Rural Economic Development Tool: An Exploration of the Literature. By Martha Frederick. Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture. Bibliographies and Literature of Agriculture No. 122.

Abstract

Tourism is a popular rural economic development tool. This annotated bibliography presents studies from economics and other social sciences that explore tourism. Topics covered include the tourism industry, measuring and forecasting tourism demand, valuation of tourism resources, effects of tourism, and theories and applications of tourism development. Each annotation contains keywords, and the bibliography ends with author and subject indexes.

Keywords: Bibliography, tourism, economic development

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Summary

This bibliography presents diverse viewpoints on tourism as an aid to rural economic development. Although most studies on rural tourism development concentrate on benefits and ignore costs, others focus on the possible losses that can come from such development. Each benefit of rural tourism development tends to come with a corresponding cost.

First, tourism creates new and often needed jobs in rural areas. Since most are low-skill jobs, such as food servers and retail clerks, they require little training of the rural residents. Such jobs match the worker skills of many rural residents. However, such jobs are often low-paying, seasonal, and offer few or no benefits.

Second, tourism can provide tax revenues for rural areas. It taxes not only the tourists, however, but also all the rural residents, including those who do not benefit from tourism development.

An increased demand for rural land is a third benefit of tourism development. But, such demand can lead to inflated prices that put the cost of land and housing beyond the reach of many local residents.

Fourth, rural tourism development is thought to place few demands on local services. While this may be true in the cases of schools and hospitals, tourism can result in increased crime and an increased demand for the services of police.

Tourism often supports the culture of rural areas and encourages the conservation and restoration of historic sites. But, the popularity of the destination can result in overcrowding that disrupts the daily life and customs of the destination. Also, the increased demand for local arts and crafts resulting from tourism development often leads to a lowering of the quality of these arts and crafts.

Rural tourism is often based on a natural quality or resource, like the beauty of a rural area. Thus, tourism development does not need to enhance the tourist attraction, but tourism development can easily result in overbuilding and congestion. Too much development, therefore, reduces the attractiveness of the natural resource that originally drew the tourists.



Tourism as a Rural Economic Development Tool: An Exploration of the Literature

Martha Frederick

Introduction

Tourism is often hailed as a viable economic development strategy for rural areas and communities. Unlike other development options, such as recruitment of manufacturing plants, tourism is considered a clean, easy-to-establish, and growing industry. Nearly every State and many regional and local areas have organizations to promote tourism development. Rural tourism has been the subject of many recent workshops, conferences, and mandated studies. This bibliography explores the literature behind this popular strategy and presents some important empirical studies on rural tourism in particular.

The bibliography presents diverse viewpoints on rural tourism development. Sources vary even as to their definitions of tourism. Some of the writings reduce tourism to pleasure travel only, excluding other types of travel, such as business travel and family visits. Other studies include duration and distance components in their definitions of tourism. In other words, a tourist is someone who travels at least a minimum number of miles from home for a minimum number of days. But, data are not available to make practical use of such fine distinctions. In fact, travel and tourism are *not* separate industries by most industry classifications.

According to the Economics Research Associates (83),¹ tourism and travel made up the third largest retail-service industry in the United States, after automobile dealers and foodstores. In 1988, tourism "accounted for nearly 6.5 percent of the Nation's gross national product (GNP), directly generated over 5.5 million jobs, and contributed an estimated \$36.6 billion in Federal, State, and local tax revenues" (Economics Research Associates (83)).

Organization

Though the primary focus is rural tourism, this bibliography attempts to cover the major issues in tourism research, with sources ranging from economic literature to agricultural economics, anthropology, geography, regional science, and sociology. The bibliography emphasizes studies published since 1980 and excludes pamphlets, brochures on promoting and developing tourism, and newspaper and magazine articles on tourism.

The annotations are grouped into six sections: (1) the tourism industry and its size and behaviorial motivations for travel, (2) tourism demand, (3) valuation of tourism resources, (4) the economic, social, and environmental impacts of tourism, (5) theoretical studies of tourism development, and (6) case studies of rural tourism development.

Findings

Most of the studies on rural tourism development concentrate on its benefits and ignore its costs. This bibliography includes studies that describe the downside, such as Michal Smith's Behind the Glitter: The Impact of Tourism on Rural Women in the Southeast (63). The major finding of this exploration of the literature is that each benefit of rural tourism development is closely connected with a cost.

Tourism can be a mixed blessing. Many new tourism jobs require little training of rural residents because of the menial nature of the jobs, such as food servers, maids, and retail clerks. These jobs are often seasonal, with low wages, few benefits, and little chance for advancement. The better paying tourism jobs, such as those in management, could require the costly training of rural residents and, as a result, often go to outsiders.

¹ Italicized numbers in parentheses refer to the citation numbers in this bibliography.

Though tourism can provide new tax revenues for a rural area, it is also the source of long-term financial commitments from the area, especially in maintenance of roads and other infrastructure. Such commitments tax rural residents who do not always benefit from the tourism development.

Some studies claim that one benefit of tourism development is that it places few demands on local public services, like schools and hospitals. But, during the peak tourist season, the resulting congestion, traffic jams, vandalism, and crime can create a demand for more police officers.

Tourism creates a demand for rural land. This demand, along with restoration of unused rural housing, enhances the value of private land and property. While the increased value will raise the tax base and be a benefit to many landowners, the inflated land and housing prices often result in prices above what most local residents can afford.

Tourism is regarded as beneficial to the cultural heritage of rural areas. It is a factor in the conservation and upgrading of rural historic sites. However, tourism development can result in overcrowding that can damage these historic sites. Tourism can lead to the rediscovery or reawakening of regional cultures, but overcrowding can disrupt the patterns of daily life in the destination area. Tourism is also a factor in popularizing local arts and crafts, resulting in an increased demand for these goods. This, however, can lead to automation in the production of such crafts, lowering their quality and debasing their original meaning. It can also lead to the production of fake artifacts.

The rural tourism attraction is often a natural resource, like the beauty of a rural area. In these cases, little physical development is needed to promote the tourism product. However, overdevelopment and overcrowding can degrade, or even destroy, the resource and the environment that first attracted the tourists.

The Tourism Industry: Its Importance and Size

The popular literature on tourism contains many claims, often poorly supported, about the size and importance of the tourism industry. Though many tourism studies refer to the size and importance of the tourism industry, few have made these topics their focus. The studies presented in this section attempt to define and measure the industry.

The sourcebook by Engass (2) presents a wealth of information on many aspects of the tourism industry, including contacts with tourism and travel organizations. Smith (5) measures the size of the tourism industry in Canada by employing a method based on the Standard Industrial Classification (SIC) code. Paulin (3) measures the size of the industry in the United States by tracking the expenditures consumers make on vacations.

1. Eadington, William R., and Milton Redman. 1991. "Economics and Tourism," *Annals of Tourism Research* 18(1), pp. 41-56.

Discusses applications of economic analysis to the study of tourism. Explains use of economic tools and how they relate to tourism, including consumer and production theory, market structure, deductive modeling, and cost-benefit analysis. Shows how an economic perspective gives insight into the decisions made by consumers, private sector suppliers, government agencies, and policymakers.

Keywords: Economics, consumer behavior, market structure, cost-benefit analysis.

2. Engass, Peter M. 1988. Tourism and the Travel Industry: An Information Sourcebook. Oryx Sourcebook Series in Business and Management. Phoenix, NY: Oryx Press, 152 pp.

Provides information on all aspects of tourism and the travel industry, such as domestic and international tourism, economic and cultural effects, planning and development of tourism, and future trends. Contains annotations of studies, books, bibliographies, and proceedings. Also, provides names of professional and nonprofit tourism and travel organizations at every level of government and lists the organizations that keep tourism and travel data.

Keywords: Sourcebook, economic impacts, cultural impacts, tourism organizations, travel data, international tourism.

3. Paulin, Geoffrey. June 1990. "Consumer Expenditures on Travel, 1980-87," Monthly Labor Review. U.S. Dept. of Labor, Bureau of Labor Statistics, pp. 56-60.

Uses data from the 1987 Consumer Expenditure Survey to track the cost of vacation travel for 1981-87 and explores three components of vacation travel: transportation, food and beverages, and lodging. Shows that households spent the same share of their income on vacations but in different ways; for example, high-income households spent larger shares on air transportation and lodging than did low-income households. Includes data tables.

Keywords: Consumer Expenditure Survey, tourism expenditures, consumer behavior, travel costs.

4. Perdue, Richard R., and Martin R. Bodkin. 1988. "Visitor Survey Versus Conversion Study," *Annals of Tourism Research* 15(1), pp. 76-87.

Compares and contrasts 1983 data collected by an inquiry conversion survey and from a visitor survey conducted in Nebraska. Conversion surveys, used to evaluate advertising campaigns, sample individuals who request State travel information packets during a specified period. Visitor surveys, used to monitor changes and trends in a State's tourism industry, sample visitors to the State. Because visitor surveys require extensive field work and are more expensive, conversion surveys are often used to estimate visitors' travel behaviors. Shows that the two methods provide different estimates of travel behaviors and visitor characteristics. Concludes that inquiry conversion surveys are inappropriate substitutes for visitor surveys.

Keywords: Inquiry conversion survey, visitor survey, Nebraska.

5. Smith, Stephen L.J. 1988. "Defining Tourism: A Supply-Side View," Annals of Tourism Research 15(2), pp. 179-190.

Proposes a supply-side definition of the tourism industry and measures the 1981 and 1982 expenditures in the tourism industry in Canada. Constructs a two-tier approach to businesses in the tourism sector. Tier 1 industries are those that would not exist without travel, such as airlines, passenger railroads, and travel agencies. Tier 2 industries serve both tourists and local residents, such as restaurants, hotels, and retail stores. Using various data sources, determines how much of the business in tier 2 industries is due to tourist trade and defines tourism ratios for these industries. Calculates the magnitude of the tourism industry and its contribution to the gross domestic product (GDP) of Canada. Using data from 1981-82, finds tourism's total contribution was over \$8 billion, or 2.7 percent of the GDP, larger than the contributions of forestry and of agriculture. Major strength of this definition is that it is based on Standard Industrial Classification (SIC) code.

Keywords: Supply-side, tourism industry, tourism ratio, gross domestic product, SIC code, Canada.

6. Sobal, Jeff. 1981. Tourism Research and the Social Sciences. Monticello, IL: Vance Bibliographies, #P647, 42 pp.

Provides unannotated citations on tourism from economic, geographic, and sociological perspectives. Is international in scope and includes other bibliographies among its citations.

Keywords: Literature review, international tourism, bibliography.

7. Van Soest, Arthur, and Peter Kooreman. 1987. "A Micro-Economic Analysis of Vacation Behavior," *Journal of Applied Economics* 2(3), pp. 215-226.

Presents a microeconometric limited dependent variable model that simultaneously explains the decision of whether or not to go on vacation, the destination choice, and the amount of vacation-related expenditures. Data are from a cross-section survey of Dutch households. Finds a significant difference in income elasticity

between domestic and international vacations. Also, finds the owning of a large durable good, such as a boat, to be a significant determinant in vacation decisions.

Keywords: Microeconometric model of vacation behavior, income elasticity, Holland.

Measuring and Forecasting Tourism Demand

The literature on measuring and forecasting tourism demand is a direct outgrowth of outdoor recreation demand research. Hence, many of the studies here are outdoor recreation demand studies.

The travel cost method is the most popular method of measuring current recreation and tourism demand. It is also used to forecast demand. The travel cost method calculates demand by creating zones of origin around the destination site and estimating the cost of traveling from each zone to the destination. Many studies, such as those by Gum and Martin (18), Haspel and Johnson (19), Phillips and Silberman (23), Ribaudo and Epp (24), Rosenthal (25), Smith and others (27), Smith and Kopp (28), and Vaughan and others (30), use the travel cost method.

Researchers have improved the accuracy of the travel cost method over time by refining various aspects of the method. Bockstael and others (10) and Smith and others (27) studied time costs. Baxter and Ewing (9), Brown and Nawas (11), and Vaughan and others (30) focused on aggregating the zones of origin around the destination. Baxter and Ewing (9), Haspel and Johnson (19), and Smith and Kopp (28) studied the effects of multiple destination trips on the travel cost method. Finally, Rosenthal (25) concentrated on substitute prices.

Methods other than the travel cost method are used to measure and forecast tourism demand. Several researchers, including Arbel and Ravid (8), Calatone and others (13), Clewer and others (16), and Uysal and Crompton (29), employ time-series models. Mendelsohn (21) proposes partitioning, index, and hedonic models. Smith (26) reviews and compares five demand models. Comparisons of forecasting models are found in studies by Calatone and others (12 and 13), Clewer and others (16), Fujii and Mak (17), and Uysal and Crompton (29).

8. Arbel, Avner, and S. Abraham Ravid. 1985. "On Recreation Demand: A Time-Series Approach," Applied Economics 17(6), pp. 979-990.

Uses time-series analysis to analyze the effects of weather, income, energy prices, energy shortages, and value of the dollar versus foreign currency on recreation demand. Studies parks and recreation facilities in New York State and finds income to be the most important determinant of long-term recreation demand. Also, finds that a significant drop in disposable income results in lower use of recreation areas and that weather has only a short-term effect. Hypothesizes that nearby recreation facilities are used more when travel to faraway places becomes more expensive because of high energy costs and/or lower incomes.

Keywords: Recreation demand, time-series analysis, New York State.

9. Baxter, Mike, and Gordon Ewing. 1981. "Models of Recreational Trip Distribution," Regional Studies 15(5), pp. 327-344.

Using an area in Scotland as its sample, investigates singly constrained gravity models of recreational trip distribution, comparing different subsets of data, measures of distance traveled, deterrence functions, and levels of zonal aggregation. Finds consistency in the estimates of trip distribution for the most disaggregated zones and variability in the estimates for the more aggregated zones. Introduces models that allow for the effect of barriers to travel and for multiple destination trips. Also, discusses limitations of the models.

Keywords: Gravity models, multiple destination trips, zonal aggregations, Scotland.

10. Bockstael, Nancy E., Ivar E. Strand, and W. Michael Hanemann. 1987. "Time and Recreational Demand Model," *American Journal of Agricultural Economics* 69(2), pp. 293-302.

Develops an approach that includes time costs in recreation demand models. Shows how the recreationist's position in the labor market determines whether travel costs and time costs are treated as separate variables or as a combined variable in the recreationist's demand function. Applies the approach on a sample of sport fishermen.

Keywords: Recreation demand, labor market, time costs, travel costs, sport fishing.

11. Brown, William G., and Farid Nawas. 1973. "Impact of Aggregation on the Estimation of Outdoor Recreation Demand Functions," American Journal of Agricultural Economics 55(2), pp. 246-249.

Shows how aggregating data into traditional zonal averages can cause multicollinearity problems in the travel cost method of estimating recreation demand. Claims that individual observations are more effective and accurate than zonal aggregations. Studies big game hunting in Oregon to test the effectiveness of individual observations and claims significant gains in the accuracy of the estimates of demand.

Keywords: Outdoor recreation, recreation demand, travel cost method, zonal aggregations, individual observations, big game hunting, Oregon.

12. Calatone, Roger J., Anthony di Benedetto, and David C. Bojanic. 1987. "A Comprehensive Review of Tourism Forecasting Literature," *Journal of Travel Research* 26(2), pp. 28-39.

Attempts to gauge the relative accuracy of three forecasting methods: (1) explanatory methods, which include regression models, time-series models, and gravity models; (2) speculative methods, which include Delphi models, the Gearing, Swart, and Var (GSV) modeling technique, and scenario writing; and (3) integrative methods, which include combinations of the above two. Recommends use of integrative methods, specifically an explanatory method for short-term forecasts along with a speculative method for long-term forecasts. Concludes by saying that forecasts may not be more accurate than educated guesses, that more model validation is needed in forecasting studies, and that complex model building should not be undertaken for its own sake.

Keywords: Forecasting, regression analysis, time-series analysis, gravity models, Delphi models, GSV models, scenario writing.

13. Calatone, Roger J., Anthony di Benedetto, and David C. Bojanic. 1988. "Multimethod Forecasts for Tourism Analysis," Annals of Tourism Research 15(3), pp. 387-406.

Reviews forecasting studies and the predominant methods used to forecast tourism: regression and time-series analysis. Examines use of combining forecasting methods because that would allow for more information to be incorporated into the forecasts. Empirically tests the combined method by forecasting the quarterly number of tourists in Florida. Compares the combined forecasts with those obtained from either regression or time-series analysis alone and discusses parameter interpretations and accuracy of all the methods.

Keywords: Forecasting, combined forecasts, regression analysis, time-series analysis, Florida.

14. Clawson, Marion. 1959. Methods of Measuring the Demand for and Value of Outdoor Recreation. Washington, DC: Resources for the Future, Inc., 36 pp.

Is one of the earliest works on outdoor recreation and tourism. Examines four ways to measure outdoor recreation: (1) gross volume of business generated by the outdoor recreation opportunities, (2) value added to the gross volume of business by local businesses, (3) demand for outdoor recreation, and (4) consumer surplus. Focuses on demand and creates demand curves based on data about visitors to Yosemite and other national parks. Shows how demand curves would change with increases in entrance fees to parks.

Keywords: Outdoor recreation, recreation demand, gross volume of business, value added, recreation experience, consumer surplus.

15. Clawson, Marion, and Jack L. Knetsch. 1966. *Economics of Outdoor Recreation*. Resources for the Future, Inc. Baltimore, MD: The Johns Hopkins Univ. Press, 328 pp.

Differentiates between leisure and recreation by defining recreation as the activity engaged in during leisure time. Explains the demand for outdoor recreation and the supply of recreation resources. Contents include leisure, the character of outdoor recreation, elements of recreation demand, causal factors in demand, methods to estimate future use, use of recreation resources, preservation of recreation quality, value of land and water resources when used for recreation, economic effects on local areas, cost considerations in providing public recreation facilities, research directions for outdoor recreation, and major public policy issues.

Keywords: Leisure, recreation, outdoor recreation, recreation demand, economic impacts, benefit-cost analysis.

16. Clewer, Ann, Alan Pack, and M. Thea Sinclair. 1990. "Forecasting Models for Tourism Demand in City Dominated and Coastal Areas," *Papers of the Regional Science Association* 69, pp. 31-42.

Uses structural time-series analysis to forecast tourism demand for Spanish coastal areas and cities. Shows the variations in demand by nationality of the tourist and by seasonality, both of which can occur at subnational levels. Claims that structural time-series analysis is more accurate than Box-Jenkins models.

Keywords: Forecasting, time-series analysis, Box-Jenkins model, tourism demand, Spain.

17. Fujii, Edwin T., and James Mak. 1981. "Forecasting Tourism Demand: Some Methodological Issues," *The Annals of Regional Science* 15(2), pp. 72-82.

Investigates different methods of forecasting tourism demand by studying data on air passengers to Hawaii. Uses extended Box-Cox autoregressive tests for functional form and ridge regression to control for the effects of collinearity problems among the explanatory variables. Finds Box-Cox autoregressive tests more accurate than either ordinary least squares or generalized least squares techniques in forecasting tourism demand.

Keywords: Forecasting, tourism demand, Box-Cox tests, regression analysis, Hawaii.

18. Gum, Russell L., and William E. Martin. 1975. "Problems and Solutions in Estimating the Demand for and Value of Rural Outdoor Recreation," *American Journal of Agricultural Economics* 57(4), pp. 558-566.

Presents an improved methodology for estimating demand for outdoor recreation and for evaluating the recreation resource by use classification. Studies empirically all outdoor recreation activities in Arizona. Finds that the improved methodology produces larger estimates of value of recreation resources than those from the travel cost method and produces nearly identical estimates to the gross variables expenditures method. Concludes by claiming that researchers should concentrate more on interpreting the estimates and less on improving the methodology of obtaining the estimates.

Keywords: Forecasting, outdoor recreation, recreation demand, travel cost method, gross variables expenditures method, Arizona.

19. Haspel, Abraham E., and F. Reed Johnson. 1982. "Multiple Destination Trip Bias in Recreation Benefit Estimation," *Land Economics* 58(3), pp. 364-372.

Examines the consequences of multiple destination trips on the travel cost method of estimating recreation benefits by studying visitors to Bryce Canyon National Park, Utah. Suggests a way to correct the bias in the travel cost method when considering multiple destination trips. Finds nearly identical estimates from the corrected travel cost method and from directly questioning a recreationist's willingness-to-pay.

Keywords: Recreation demand, travel cost method, multiple destination trips, willingness-to-pay, Utah.

20. Leiper, Neil. 1989. "Main Destination Ratio: Analyses of Tourist Flows," Annals of Tourism Research 16(4), pp. 530-541.

Presents method for providing statistics on trips with more than one destination, which are currently omitted from published World Tourism Organization data and from many models of travel or tourism demand. Describes main destination ratio (MDR) with examples from 1982 trips by Japanese, Australian, and New Zealand tourists to 16 countries and also from 13 years' worth of data on the trips of Australians to Singapore and Hong Kong. Explains how MDR can be applied to domestic tourism and defines MDR as the ratio of the number of tourist arrivals in a given place for whom that place is their main or sole destination to the total number of arrivals in that place.

Keywords: Tourism demand, multiple destination trips, main destination ratio (MDR), marketing, international tourism, Japan, Australia, New Zealand, Singapore, Hong Kong.

21. Mendelsohn, Robert. 1987. "Modeling the Demand for Outdoor Recreation," Water Resources Research 23(5), pp. 961-967.

Reviews strengths and weaknesses of three ways to model recreation demand: partitioning, hedonic, and index models. Partitioning models group sites into small homogeneous sets and treat each set as a unique good. Hedonic models disaggregate goods into their component characteristics and model prices and demands for each characteristic. Index models measure choices among limited alternatives and create an index of characteristics of the alternatives.

Keywords: Outdoor recreation, recreation demand, partitioning model, hedonic model, index model.

22. Noe, F.P., Rob Snow, and Gary Hampe. 1987. "Visitor Use of the Outdoors: Missing Links Between Policy and Recreation," *Policy Studies Review* 7(2), pp. 377-384.

Views recreation demand in a new way, using a model that links the demographic characteristics of recreationists with their values and attitudes. Uses open-ended questions on survey questionnaire to determine which activities the respondents enjoy, do not enjoy, or will not do. Claims that overall demand for an activity is determined by both those who passionately like and those who passionately dislike the activity. Cites offroad vehicle driving as an example. Uses stepwise discriminant analysis on the survey results and finds that the model can differentiate the recreationists better by the activities they enjoy than by the activities they dislike. Concludes that demand for recreation activities is influenced by how recreation preferences are measured.

Keywords: Outdoor recreation, recreation demand, demographic characteristics, recreation activities, discriminant analysis, recreation preferences.

23. Phillips, Richard A., and Jonathan I. Silberman. 1985. "Forecasting Recreation Demand: An Application of the Travel Cost Method," *The Review of Regional Studies* 15(1), pp. 20-25.

Illustrates use of the travel cost model to forecast recreation demand by estimating the number of visitors to Virginia Beach in 1981 and using those estimates to forecast the number of visitors in 1990. Says the forecasting method is useful to planners since it is not overly data intensive and its precision-to-cost ratio is high.

Keywords: Travel cost method, recreation demand, forecasting, Virginia Beach, Virginia.

24. Ribaudo, Marc O., and Donald J. Epp. 1984. "The Importance of Sample Discrimination in Using the Travel Cost Method to Estimate the Benefits of Improved Water Quality," Land Economics 60(4), pp. 397-403.

Using the travel cost method, forecasts the changes in use of a recreation site if the water quality of the site were improved. Studies St. Albans Bay of Lake Champlain in New York State, a site degraded by water pollution. Shows that both current and former users of the bay would benefit from cleaner water. However, also finds that results cannot account for the presence of increased congestion at the site or increased property values around the site.

Keywords: Forecasting, travel cost method, consumer surplus, New York State.

25. Rosenthal, Donald H. 1987. "The Necessity for Substitute Prices in Recreation Demand Analyses," *American Journal of Agricultural Economics* 69(4), pp. 828-837.

Describes the consequences of omitting substitute prices from the travel cost model. Major consequence is significant bias in consumer surplus estimates. Develops three sets of travel cost methods from a data base of 60,000 day users of reservoirs in Missouri and Kansas. The model with no substitute prices results in much higher estimates of consumer surplus than do the two models with substitute prices. Concludes that it is difficult to predict direction and magnitude of the effects of omitting price substitutes on value estimates without analyzing the data and reinforces the need to build recreation demand models on a site-by-site basis.

Keywords: Recreation demand, substitute prices, travel cost method, consumer surplus, Missouri, Kansas.

26. Smith, V. Kerry. 1988. "Selection and Recreation Demand," American Journal of Agricultural Economics 70(1), pp. 29-36.

Compares five models that estimate travel costs and differ in their treatment of selection effects arising from onsite surveys: ordinary least squares model, tobit model, truncated maximum likelihood estimator, Poisson maximum likelihood estimator, and travel cost method. Shows that all models can adequately describe a person's recreation decisions and can select an estimator to mitigate the problems of using onsite surveys. Finds that the treatment of selection effects was not important in their test of water-based recreation sites near Pittsburgh but feels that selection effects could be important when studying sites on a national level. Also, finds that choice of an estimator leads to large variations in estimates of consumer surplus.

Keywords: Recreation demand, regression analysis, tobit model, truncated maximum likelihood estimator, Poisson maximum likelihood estimator, travel cost method, consumer surplus, Pittsburgh, Pennsylvania.

27. Smith, V. Kerry, William H. Desvousges, and Matthew P. McGivney. 1983. "The Opportunity Cost of Travel Time in Recreation Demand Models," *Land Economics*, 59(3), pp. 259-278.

Evaluates different methods of valuing time in recreation demand models. Finds that the treatment of the cost of onsite time has important implications for evaluating the opportunity cost of travel time in recreation models. Also, finds that the wage rate could not be rejected as an appropriate measure of opportunity cost. Claims to extend beyond past analyses of opportunity cost by (1) using a hedonic wage model to predict the recreationist's wage rate, which is, in turn, used for appraising the recreationist's opportunity cost of time, (2) specifying travel cost demand models so that the opportunity cost of travel time is testable, and (3) examining the potential role for costs of onsite time in recreation site demand functions.

Keywords: Recreation demand, travel time, hedonic model, travel cost method.

28. Smith, V. Kerry, and Raymond J. Kopp. 1980. "The Spatial Limits of the Travel Cost Recreational Demand Model," *Land Economics* 56(1), pp. 64-72.

Tests the spatial limits of the travel cost model of recreation demand by analyzing data on visitors to the Ventana Wilderness area in California. The travel cost model assumes that the trip is to the destination site only. Finds that this assumption can become less true as the origin of the trip becomes more distant from the destination.

Keywords: Recreation demand, travel cost method, consumer surplus, wilderness areas, California.

29. Uysal, Muzaffer, and John L. Crompton. 1985. "An Overview of Approaches Used to Forecast Tourism Demand," Journal of Travel Research 23(4), pp. 7-15.

Reviews qualitative and quantitative approaches to forecasting tourism demand. Describes these qualitative methods: analysis of national or regional vacation surveys, surveys of potential visitors, Delphi models, and judgment-aided models. Describes these quantitative methods: time-series models, gravity and trip generation models, and multivariate regressions. Provides these caveats for all forecasting methods: forecasts are only

approximations, forecasts lose accuracy if projected for more than a year, and forecasts should be given in a range and not as a single number. Claims that qualitative and quantitative methods used together give best forecasts.

Keywords: Forecasting, survey, Delphi model, judgment-aided model, time-series analysis, gravity models, regression analysis.

30. Vaughan, William J., Clifford S. Russell, and Michael Hazilla. 1982. "A Note on the Use of Travel Cost Methods with Unequal Zonal Populations: Comment," Land Economics 58(3), pp. 400-407.

Discusses problems in the travel cost method that result from using aggregated zones of unequal populations, which distort estimates of consumer surplus and site values. Explains how several difficult econometric issues in travel cost method are only partially solved and that use of an a priori linear specification is inappropriate. Explains the Lahiri-Egy estimator and says that this is a promising alternative when dealing with either aggregated or individual visitation data.

Keywords: Recreation demand, travel cost method, unequal zonal populations, consumer surplus, Lahiri-Egy estimator.

Valuation of Tourism Resources

Tourism resources, also called environmental commodities or amenity resources, encompass a variety of factors, such as beaches, mountains, pleasant climates, clean air, historic sites and parks, and cultural sites. The common element of most tourism resources is that they are nonmarket goods. Because no prices are associated with them, their value must be estimated in nontraditional ways. Studies in this section describe various ways to calculate the value of environmental commodities and amenities.

The travel cost method, popular for measuring and forecasting demand, is also used to estimate the value of amenities. Dwyer (34) compares and contrasts the travel cost method with several other methods of estimating satisfaction with tourism. Matulich and others (37) call for the use of the travel cost method in placing a value upon amenities. The studies by Sorg and Loomis (42), Stoll (43), and Stoll and others (44) also use the travel cost method.

Benefit-cost analysis, also called cost-benefit analysis, is one of the most widely used valuation methods for determining whether or not a resource should be developed. This method is used and explained in the studies by Cuddington and others (33), Madariaga and McConnell (36), Smith (41), and Stoll and others (44).

The contingent valuation model is another often used tool to estimate the value of amenities. It is featured in the studies by Bergstrom and others (31), Madariaga and McConnell (36), Matulich and others (37), Schulze and others (40), Sorg and Loomis (42), Stoll (43), and Stoll and others (44).

Hedonic pricing models are used and described in studies by Matulich and others (37), Milon and others (38), and Smith (41).

31. Bergstrom, John C., John R. Stoll, and Alan Randall. 1990. "The Impact of Information on Environmental Commodity Valuation Decisions," *American Journal of Agricultural Economics* 72(3), pp. 614-620.

Develops a contingent valuation model that incorporates how information affects the willingness-to-pay for environmental commodities. Surveys recreation users of Louisiana wetlands to test the model. Hypothesizes and finds that people are willing to pay more to protect the environment when they have more information about environmental commodities. Shows support for information in obtaining accurate environmental commodity consumer valuations.

Keywords: Environmental commodities, information effects, contingent valuation method, willingness-to-pay, Louisiana.

32. Burch, Ted L., George H. Siehl, and Judy Noritake. April 1990. Amenity Resources in Rural Economies: Selected References. CRS Report for Congress #90-218. Congressional Research Service, The Library of Congress, 21 pp.

Is an annotated bibliography of current amenity-related literature. Contents include amenity resources, economics of leisure resources, preservation in rural America, and congressional hearings.

Keywords: Bibliography, literature review, amenities, tourism development, rural preservation, Congress.

33. Cuddington, John T., F. Reed Johnson, and Jack L. Knetsch. 1981. "Valuing Amenity Resources in the Presence of Substitutes," *Land Economics* 57(4), pp. 526-535.

Says traditional benefit-cost analysis ignores amenities or values them arbitrarily because such values are difficult to measure. Discusses the Krutilla-Fisher model of valuing amenities and tests the model on both unique recreation sites and sites where substitutes exist. Finds the Krutilla-Fisher model appropriate for unique sites with no substitutes.

Keywords: Amenities, benefit-cost analysis, Krutilla-Fisher model, unique site, substitute site.

34. Dwyer, John F. 1980. "Estimating Consumer Satisfaction Associated with an Increase in Public Tourism Supply: An Economic Approach," *Tourism Planning and Development Issues*. Ed. Donald E. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 371-379.

Explains how to evaluate consumer satisfaction with tourism by giving examples of several models that measure satisfaction: willingness-to-pay (a measure of benefit), willingness-to-sell (a measure of cost), travel cost method, and survey method. Concludes that benefit-cost analysis is the best method and that its use will increase.

Keywords: Consumer satisfaction, willingness-to-pay, willingness-to-sell, travel cost method, survey.

35. Harrison, A.J.M., and M.J. Stabler. 1981. "An Analysis of Journeys for Canal-based Recreation," Regional Studies 15(5), pp. 345-358.

Studies the recreation activities along canals in England and develops a model based on Clawson's travel cost method to explain the travel mode and travel distance of canal users. Finds that travel costs of visitors to a specific site along the canals is an estimate of visitors' willingness-to-pay for that site and that the distribution of travel modes used (such as driving, walking, or using public transportation) is a function of the visitors' average income.

Keywords: Recreation demand, travel cost method, journey distance, journey time, willingness-to-pay, travel mode, England.

36. Madariaga, Bruce, and Kenneth E. McConnell. 1987. "Exploring Existence Value," Water Resources Research 23(5), pp. 936-942.

Discusses existence value, which is the concept that individuals value the preservation of natural resources independent of their own use of the resource. Assesses the role of existence value in a cost-benefit analysis by studying nonusers' attitudes toward projects to improve water resources of the Chesapeake Bay. Uses a stylized contingent valuation experiment to conduct the study. Finds that altruism is a motive underlying existence value and that goods other than natural resources may also have existence value.

Keywords: Existence value, willingness-to-pay, contingent valuation model, cost-benefit analysis, altruism, Chesapeake Bay.

37. Matulich, Scott C., William G. Workman, and Alan Jubenville. 1987. "Recreation Economics: Taking Stock," Land Economics 63(3), pp. 310-316.

Speculates on why recreation economists have studied only benefit estimation and nonmarket valuation and why too little attention has been given to physical production and transformation linkages between public policies and recreation values. Calls for use of travel cost method, contingent valuation method, bioeconomics, and hedonics to measure recreation use and demand.

Keywords: Recreation economics, benefit estimation, nonmarket valuation, recreation demand, travel cost method, contingent valuation method, bioeconomics, hedonic method.

38. Milon, J. Walter, Jonathan Gressel, and David Mulkey. 1984. "Hedonic Amenity Valuation and Functional Form Specification," *Land Economics* 60(4), pp. 378-387.

Examines the problem of choosing a functional form for hedonic pricing models and develops a flexible functional form for amenity valuation using a generalized Box-Cox transformation. This approach leads to amenity value estimates with no prior restrictions on the hedonic relationship. Describes the hedonic framework, Box-Cox transformation, and flexible functional form and then tests this approach on three Florida sites. Finds that this flexible functional form provides a reliable way to identify amenity relationships.

Keywords: Amenities, amenity valuation, functional form, hedonic model, Box-Cox tests, Florida.

39. Peterson, George L., B.L. Driver, and Robin Gregory, ed. 1988. Amenity Resource Valuation: Integrating Economics with Other Disciplines. State College, PA: Venture Publishing, Inc., 260 pp.

Describes problems with placing a value on amenities and discusses methods to estimate amenity values. Sections of the book include the amenity valuation problem, approaches to valuation, concerns about economic measures, methods of monetary valuation, and methodological issues in economic valuation.

Keywords: Amenities, amenity valuation, economics.

40. Schulze, William D., Ralph C. d'Arge, and David S. Brookshire. 1981. "Valuing Environmental Commodities: Some Recent Experiments," *Land Economics* 57(2), pp. 151-172.

Assesses six studies that explain three objectives: preferences for environmental commodities, nonmarket attributes associated with the environment, and potential biases in nonmarket valuation techniques. Introduces and explains contingent valuation method to forecast demand for an environmental good.

Keywords: Forecasting, environmental commodities, nonmarket valuation, contingent valuation method.

41. Smith, V. Kerry. 1987. "Benefit Estimation and Recreation Policy," Policy Studies Review 7(2), pp. 432-442.

Focuses on measuring the net benefits from providing and improving the natural resources that provide outdoor recreation. Uses the net benefits measures in cost-benefit analysis studies. Defines the elements of the benefits provided by recreation and describes methods used to determine the value of environmental resources.

Keywords: Outdoor recreation, benefit estimation, travel cost method, cost-benefit analysis, varying parameters framework, hedonic method, random utility framework.

42. Sorg, Cindy R., and John B. Loomis. 1984. Empirical Estimates of Amenity Forest Values: A Comparative Review. General Technical Report RM-107. U.S. Dept. of Agriculture, Forest Serv., Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO, 23 pp.

Reviews empirical studies in recreation economics that use contingent value method or travel cost method to estimate the value of recreation. Sorted by activity, the estimates in the studies are adjusted to 1982 dollars to make them comparable. Finds a reasonable degree of consistency between the two methods to estimate the value of recreation resources.

- Keywords: Recreation demand, travel cost method, contingent valuation method, recreation activities, amenities, literature review.
- 43. Stoll, John R. 1983. "Recreational Activities and Nonmarket Valuation: The Conceptualization Issue," Southern Journal of Agricultural Economics 15(2), pp. 119-125.

Explains and compares the travel cost method and contingent value method to measure demand with the nonmarket valuation of recreational activities. Reviews the literature on the two methods. Describes recreation as a commodity and suggests future research topics.

Keywords: Recreation demand, travel cost method, contingent valuation method, nonmarket valuation, recreation activities.

44. Stoll, John R., John B. Loomis, and John C. Bergstrom. 1987. "A Framework for Identifying Economic Benefits and Beneficiaries of Outdoor Recreation," *Policy Studies Review* 7(2), pp. 443-452.

Discusses the weaknesses of cost-benefit analysis in measuring the benefits of natural resource projects because of the difficulty in quantifying amenity resources, which are nonrival in consumption and nonexclusive in provision. Describes nonmarket valuation techniques, such as travel cost method and contingent valuation method.

Keywords: Amenities, cost-benefit analysis, use value, nonuse value, nonrival value, nonexclusive resource, willingness-to-pay, travel cost method, contingent valuation method.

45. Thraen, Cameron S., Ted L. Napier, and Stephen L. McClaskie. 1989. "Factors Influencing Attitudes Toward the Commitment of Economic Resources to Outdoor Recreation Development," *Journal of the Community Development Society* 20(1), pp. 19-36.

Presents results of a 1985 survey of Ohio residents examining their willingness-to-pay for improvements in outdoor recreation facilities in the State. Theorizes that people will support efforts that will benefit them. Finds that respondents feel economic resources should be allocated to outdoor recreation facilities, but the explained variance was low.

Keywords: Recreation demand, willingness-to-pay, outdoor recreation, survey, Ohio.

46. Wandner, Stephen A., and James D. Van Erden. 1980. "Estimating the Demand for International Tourism Using Time Series Analysis," *Tourism Planning and Development Issues*. Ed. Donald E. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 381-392.

Says tourism demand can be estimated with several econometric models and builds a case for use of time-series analysis. Explains time-series analysis with Puerto Rico as example. Describes the Box-Jenkins transfer model and uses it to predict tourist arrivals at Puerto Rico.

Keywords: International tourism, tourism demand, time-series analysis, Box-Jenkins model, Puerto Rico.

47. Wetzstein, Michael E. 1982. "An Economic Evaluation of a Multi-Area Recreation System," Southern Journal of Agricultural Economics 14(2), pp. 51-55.

Explains why recreation demand functions are too complicated to use when studying a large number of recreation areas and proposes a different method, borrowed from international trade theory. Aggregates alternative recreation areas into one explanatory variable based on separability and constant elasticity of substitution. Applies the method to wilderness areas in California and shows how the use of existing areas would change if additional areas were added to the system.

Keywords: Recreation demand, international trade theory, constant elasticity of substitution, wilderness areas, California.

Impacts of Tourism

Tourism can profoundly affect the local destination area. The effects are of three major types: economic, cultural or social, and environmental. The annotations in this section are grouped by the three types of impacts.

Economic effects are the most thoroughly studied of the three types. Tourism affects an area's employment and income in both direct and indirect ways. For example, a person employed in a tourist resort is a direct employment effect. When this person spends part of that income in a local store, part of the store owner's income is indirectly linked to tourism. Indirect effects are measured with multipliers. Multipliers are thoroughly explained in Archer's book (48). Studies that estimate both direct and indirect economic impacts of tourism include Bergstrom and others (50), Johnson and Thomas (57 and 58), and Propst (62).

Two other major topics emerge from the literature on economic effects. One is the seasonality of many tourism jobs. This is addressed by Brown and Connelly (53), Mueller (61), Michal Smith (63), and Stynes and Pigozzi (64). The other topic is the short-term tourist event, such as a festival or fair, compared with an ongoing tourist attraction, such as a park. Della Bitta and others (55) studied the short-term tourist event.

One of the topics in the literature on social or cultural effects of tourism is the relationship between tourism and crime. Fujii and Mak (65) and Pizam (70) find that tourism is associated with higher levels of some types of crime. Tourism also affects the acculturation process. The case studies in Valene Smith (73) analyze the anthropology of tourism and acculturation. Another major theme in the literature of the social effects of tourism is the perception of tourism's benefits and costs by the residents of the destination area. Liu and Var (66), Milman and Pizam (67), Pizam (69), and Sethna (72) all study residents' perceptions.

All of the studies on the environmental impacts of tourism discuss the concept of carrying capacity. Beautiful scenery and other amenities or environmental commodities are often part of the rural tourism product. Yet, the presence of tourists harms and degrades these commodities if the number of visitors exceeds the area's carrying capacity.

Economic Impacts

48. Archer, Brian. 1977. Tourism Multipliers: The State of the Art. Bangor, Wales: Univ. of Wales Press, 85 pp.

Presents comprehensive overview of tourism multipliers and their use. Contents include the definition and history of tourism multipliers, multiplier models, such as base theory models and input-output models, limitations of multipliers, and the value of multipliers. Defines multipliers as "repercussive streams of income and employment generated in a diminishing geometric progression from an outside or exogenous expenditure." Discusses different types of multipliers: sales, output, income, and employment. Also, discusses their limitations, which come from lack of available data and restrictive assumptions in most multiplier models.

Keywords: Multipliers, sales multipliers, output multipliers, income multipliers, employment multipliers, direct impacts, indirect impacts, induced impacts, economic base theory, input-output analysis.

49. Archer, Brian. 1984. "Tourism and the British Economy," Rivista Internazionale di Scienze Economiche e Commerciali 31(7), pp. 596-613.

Examines the effects of tourism on revenue, income, employment, and the balance of payments in the United Kingdom. Discusses trends in and size of the British tourism industry. Compares domestic and foreign tourism and discusses the multiplier effect. Contains an appendix that explains input-output analysis.

Keywords: Economic impacts, tourism industry, foreign tourism, domestic tourism, multipliers, input-output analysis, United Kingdom.

50. Bergstrom, John C., H. Ken Cordell, Gregory A. Ashley, and Alan E. Watson. 1990. "Economic Impacts of Recreational Spending on Rural Areas: A Case Study," *Economic Development Quarterly* 4(1), pp. 29-39.

Estimates the recreation expenditures near five Georgia State parks from data provided by the Public Area Recreation Visitor Study (PARVS). Using IMPLAN, the Forest Service's input-output model, estimates the direct, indirect, and induced economic effects of the expenditures on the local regions around each park. Finds outdoor recreation to be a viable economic development idea for some rural areas and says that more research should focus on the influence of recreation on local economies.

Keywords: PARVS, IMPLAN, recreation expenditures, economic impacts, direct impacts, indirect impacts, induced impacts, input-output analysis, multipliers, Georgia.

51. Bird, Ronald, and Frank Miller. 1962. Where Ozark Tourists Come From and Their Impact on Local Economy. Research Bulletin 798. Univ. of Missouri, College of Agriculture, Agricultural Experiment Station, 48 pp.

Studies the number and origins of tourists visiting the Missouri Ozarks region. Computes relative change in tourism in four subregions of the Missouri Ozarks by studying 1939-59 growth in volume of business reported by restaurants and motels. Estimates the magnitude of the effect on income and uses the 1939-59 growth to predict growth in the subregions to 1970.

Keywords: Tourism expenditures, income impacts, projections, Ozarks, Missouri.

52. Bird, Ronald, and Frank Miller. 1962. Contributions of Tourist Trade to Incomes of People in Missouri Ozarks. Research Bulletin 799. Univ. of Missouri, College of Agriculture, Agricultural Experiment Station, 69 pp.

Studies the effects of tourism on income in 31 Missouri counties in 1959. Data studied is from a survey of 10 percent of retail and personal service establishments and from the U.S. Department of Commerce's Bureau of the Census and the State department of revenue. Finds that 21 percent of total volume of business in retail and personal service establishments was from tourists and that 97 percent of new jobs in firms catering to tourists went to local residents. Concludes that tourism is good for the Ozark region.

Keywords: Tourism expenditures, survey, income impacts, Ozarks, Missouri.

53. Brown, Tommy L., and Nancy A. Connelly. 1986. "Tourism and Employment in the Adirondack Park," Annals of Tourism Research 13(3), pp. 481-489.

Examines the magnitude of tourism employment in the Adirondack Park of New York, its seasonality, and its trends from 1975 through 1981. Estimates tourism's effects on employment by using wage data from New York State Department of Labor. Though less accurate than direct visitor surveys, this methodology is less expensive. Finds that tourism employment is more important to the Adirondack Park than to the rest of northern New York and that, as in most northern tourist areas, tourism employment is greatest in summer.

Keywords: Tourism employment, employment impacts, seasonal employment, wage data, Adirondack Park, New York State.

54. Burt, Oscar R., and Durward Brewer. 1971. "Estimation of Net Social Benefits From Outdoor Recreation," *Econometrica* 39(5), pp. 813-827.

Presents an economic framework for measuring the net social benefits from the development of a new outdoor recreation site. Details the model and applies it to water-oriented outdoor recreation sites in Missouri.

Keywords: Recreation development, benefit-cost analysis, net social benefits, Missouri.

55. Della Bitta, Albert J., David L. Loudon, G. Geoffrey Booth, and Richard R. Weeks. 1977. "Estimating the Economic Impact of a Short-Term Tourist Event," *Journal of Travel Research* 16(2), pp. 10-15.

Studies the Tall Ship '76 Celebration in Rhode Island to determine the costs and benefits of a short-term tourist event. Identifies distinct groups of participants that accounted for most of the expenditures at the event and

their demographic characteristics. Claims that this method helped to evaluate the planning of the event and is useful for planning other short-term tourist events.

Keywords: Short-term tourist event, tourism expenditures, economic impacts, Rhode Island.

56. Fletcher, John E. 1989. "Input-Output Analysis and Tourism Impact Studies," Annals of Tourism Research 16(4), pp. 514-529.

Examines input-output analysis, which is widely used to study the economic effects of tourism. Demonstrates its flexibility and the level of detail it can achieve. Claims that input-output analysis is the most comprehensive method available to study economic impacts of tourism. Describes its shortcomings: it requires assumptions that do not reflect reality, and it requires large amounts of data, especially when assumptions are relaxed to more closely reflect reality.

Keywords: Input-output analysis, economic impacts, multipliers.

57. Johnson, Peter, and Barry Thomas. 1990. "Employment in Tourism: A Review," *Industrial Relations Journal* 21(1), pp. 36-48.

Reviews key issues in estimating tourism employment. Discusses the expenditure method and the employment count method and explores the relationship between the two. Estimates empirically tourism employment of Great Britain as a whole and of specific tourist attractions, including the indirect and induced effects of tourism on employment.

Keywords: Expenditure method, employment count method, employment impacts, indirect impacts, induced impacts, multipliers, Great Britain.

58. Johnson, Peter, and Barry Thomas. 1990. "Measuring the Local Employment Impact of a Tourist Attraction: An Empirical Study," Regional Studies 24(5), pp. 395-403.

Develops a framework for estimating the effects of the North of England Open Air Museum on local employment in and around Beamish, England. Finds that tourism directly influences employment both inside and outside the museum. Discusses and measures the indirect and induced impacts on local employment. Addresses the issues of estimating the diversion of tourism demand, estimating the loss of employment elsewhere resulting from the museum, and estimating the net results on employment.

Keywords: Tourism employment, employment impacts, multipliers, direct impacts, indirect impacts, induced impacts, England.

59. Kottke, Marvin. 1988. "Estimating Economic Impacts of Tourism," Annals of Tourism Research 15(1), pp. 122-133.

Presents a linear programming model that estimates the potential economic effect of the growth of tourism in an area. Tests the model on three projected growth scenarios in New London County, Connecticut, using a benchmark situation to serve as a basis for comparison. Finds linear programming effective in estimating the number and type of new tourism enterprises most suitable for generating maximum gross income while efficiently using limited resources.

Keywords: Economic impacts, tourism growth, linear programming model, New London County, Connecticut.

60. Long, Roger B. 1987. "Effects of Recession, Inflation and High Interest Rates on Growth in a Recreation Region," The Annals of Regional Science 21(2), pp. 86-107.

Uses input-output analysis to study the effects of high interest rates, inflation, and recession between 1979 and 1983 on Blaine County, Idaho. Blaine County has a recreation-based economy and is home to Sun Valley ski area and the Sawtooth National Recreation Area. Finds that employment and wages in recreation sectors grew

in Blaine County during the study period. Claims that other natural resource areas with economies based on agriculture and forestry did not fare as well during the study period and concludes that recreation-based areas fare better.

Keywords: Input-output analysis, recreation-based economy, natural resource areas, Blaine County, Idaho.

61. Mueller, Raymond. 1977. "When is a Job a Job?" Journal of Travel Research 16(2), pp. 1-5.

Explores the seasonality of tourist-related jobs in Wisconsin. Discusses the effects of the presently used March date for gathering data on the number of jobs, a date which underestimates the number of jobs in the tourism industry. There are more tourist-related jobs in summer, during the tourist season, than in March. Finds the average-month method of job estimation the best way to evaluate the influence of seasonality on employment.

Keywords: Tourism employment, employment impacts, seasonal employment, average-month method, Wisconsin.

62. Propst, Dennis B., compiler. 1985. Assessing the Economic Impacts of Recreation and Tourism. Proceedings of Conference and Workshop, May 14-16, 1984, Department of Park and Recreation Resources, Michigan State University, Lansing, MI. Asheville, NC: Southeast Forest Experiment Station, 64 pp.

Explores the best available methodologies for assessing the economic impacts of recreation and tourism and recommends research strategies for meeting methodological and data needs. Explains the use of multipliers, input-output analysis, and economic base theory. Contents include strategies for developing multipliers, using input-output analysis to measure the effects of tourist expenditures, regional input-output methods, techniques for assessing tourism's secondary impacts, measuring supply-side economic effects on tourism industries, data considerations, and computerized models for assessing the economic effects.

Keywords: Economic impacts, multipliers, input-output analysis, economic base theory, secondary impacts.

63. Smith, Michal. 1989. Behind the Glitter: The Impact of Tourism on Rural Women in the Southeast. Lexington, KY: Southeast Women's Employment Coalition, 77 pp.

Presents the downside of tourism development as it is currently practiced in rural tourism counties in the Southeast. Uses Sevier County, Tennessee, home of Gatlinburg, Pigeon Forge, and the Great Smokies National Park, as a case study. Shows how women employed in the tourism industry fare poorly in terms of low wages, unemployment, poverty, medical benefits, insurance, and child care. Discusses negative social and environmental effects of tourism as well. Suggests ways to make tourism a better employer for its workers, especially the women most affected by it.

Keywords: Tourism development, women, poverty, family income, unemployment, Sevier County, Tennessee.

64. Stynes, Barbara White, and Bruce William Pigozzi. 1983. "A Tool for Investigating Tourism-Related Seasonal Employment," *Journal of Travel Research* 21(2), pp. 19-24.

Attempts to improve upon time-series analysis by including the effects of seasonality in the study of tourism employment. Applies harmonic analysis to tourism employment in northern Michigan. Harmonic analysis is a technique for studying time-series data that vary on a regular or periodic basis, and it differs from ordinary least squares by estimating sine and/or cosine terms instead of fitting a linear function to a set of observations.

Keywords: Employment impacts, seasonal employment, time-series analysis, harmonic analysis, Michigan.

Cultural or Social Impacts

65. Fujii, Edwin T., and James Mak. 1980. "Tourism and Crime: Implications for Regional Development Policy," Regional Studies 14(1), pp. 27-36.

With time-series and cross-section models, explores relationship between tourism and crime in Hawaii. Hypothesizes that crime increases as tourism increases and that crime is an externality associated with tourism growth. Finds crimes against property and persons, notably burglary and rape, are disproportionately higher when tourists are present.

Keywords: Tourism growth, crime, time-series analysis, cross-section model, Hawaii.

66. Liu, Juanita C., and Turgut Var. 1986. "Resident Attitudes Toward Tourism Impacts in Hawaii," Annals of Tourism Research 13(2), pp. 193-214.

Studies the attitudes of Hawaiian residents toward tourism development. Uses data from 1982 mail survey of 636 residents of Oahu, Hawaii, Maui, and Kauai. Finds strong agreement among the respondents that tourism provides many economic and cultural benefits, ambivalence that tourism provides environmental benefits, reluctance to believe that tourism causes social and environmental liabilities, and little significant variation among demographic subgroups of the respondents. Also, finds that most respondents feel that environmental protection of tourist sites is important but that they would not accept a lower standard of living to achieve such protection.

Keywords: Resident attitudes, survey, economic impacts, social impacts, environmental impacts, Hawaii.

67. Milman, Ady, and Abraham Pizam. 1988. "Social Impacts of Tourism on Central Florida," *Annals of Tourism Research* 15(2), pp. 191-204.

Tests the relationship between an area's economic dependence on tourism and the residents' support for it by studying the attractions in central Florida, such as Disney World, Cape Canaveral, Sea World, and the like. Reports on a telephone survey of 203 central Florida households and finds that 78 percent favor or strongly favor the tourism development, most respondents feel tourism improves employment opportunities, income, standards of living, and tax revenue, and most feel it worsens the problems of traffic conditions, individual crime, organized crime, and alcoholism.

Keywords: Tourism development, survey, social impacts, resident attitudes, crime, Florida.

68. Murphy, Peter E. 1985. Tourism: A Community Approach. New York: Methuen, 200 pp.

Covers the spectrum of tourism issues, including the sociocultural effects of rural tourism, and provides many examples from the United States and Canada. Contents include scope of tourism, history of tourism, tourism issues, environmental and accessibility issues and strategies, hospitality and authenticity, social and cultural strategies, tourism planning, and tourism as a community industry.

Keywords: Rural tourism, social impacts, cultural impacts, environmental impacts, carrying capacity, multipliers, cost-benefit analysis, hospitality, authenticity, acculturation, tourism planning, Canada.

69. Pizam, Abraham. 1978. "Tourism's Impacts: The Social Costs to the Destination Community as Perceived by Its Residents," *Journal of Travel Research* 16(4), pp. 8-12.

Surveys residents and entrepreneurs of Cape Cod during the summer of 1976 to measure their perceptions of tourism. Makes comparisons between attitudes toward tourism and dependence upon tourism for making a living. Finds support for the hypothesis that heavy tourism concentration leads to negative attitudes by the residents and that those who depend on tourism tend to have a more positive attitude towards tourism. Finds common complaints about traffic conditions, congestion, noise, vandalism, high prices for goods and services, drug abuse, and alcoholism. Also, discovers that positive attitudes stem from residents' high income, standard of living, and shopping opportunities.

Keywords: Resident attitudes, social impacts, survey, crime, Cape Cod, Massachusetts.

70. Pizam, Abraham. 1982. "Tourism and Crime: Is There a Relationship?" Journal of Travel Research 20(3), pp. 7-10.

Calculates the relative contribution of tourism to 10 types of crime in the United States in 1975. Shows results of regression on each type of crime using tourism and nine other sociodemographic predictors. Finds that tourism was not a determinant for motor vehicle theft, larceny, theft, burglary, murder and manslaughter, and violent crime. Finds tourism a very small, but statistically significant, determinant in property crime, robbery, rape, and aggravated assault.

Keywords: Crime, regression analysis.

71. Ryan, Chris. 1991. Recreational Tourism: A Social Science Perspective. London and New York: Routledge, 227 pp.

Describes the effects of tourism and the techniques used to determine these effects. Examines the psychological, sociological, and economic factors that influence an individual's choice of where to travel. Also, examines the quality of travel, the interactions between the tourist and other tourists, interactions between the tourist and members of the destination community, and the authenticity of the tourist experience. Other topics covered include implications of changing work patterns on tourism in the future, why tourism needs to be more considerate of its social and environmental effects, and marketing and tourism planning.

Keywords: Motivations for travel, multipliers, authenticity, economic impacts, social impacts, environmental impacts, marketing, tourism planning.

72. Sethna, Rustum J. 1980. "Social Impact of Tourism in Selected Caribbean Countries," *Tourism Planning and Development Issues*. Ed. Donald D. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 239-249.

Studies social and cultural effects of tourism upon Caribbean countries by reviewing attitudinal studies undertaken by the Caribbean Tourism Research Centre. Finds that most Caribbean people favorably view tourism development, want to interact with tourists, and want tourists to participate more in the life of their countries and not simply observe it.

Keywords: Tourism development, social impacts, cultural impacts, resident attitudes, survey, Caribbean.

73. Smith, Valene L., ed. 1989. Hosts and Guests: The Anthropology of Tourism. Philadelphia: The Univ. of Pennsylvania Press, 254 pp.

Presents, from an anthropological perspective, international case studies of cultural and social effects of tourism. Tries to build an anthropological theory of tourism and its effects on acculturation. Case studies are from Arctic parts of Alaska, Panama, Tonga, Indonesia, France, Spain, Iran, Hawaii, North Carolina, and the American Southwest.

Keywords: Anthropology, acculturation, social impacts, cultural impacts, tourism development, Alaska, Panama, Tonga, Indonesia, France, Spain, Iran, Hawaii, North Carolina, American Southwest.

Environmental Impacts

74. Lindsay, John J. 1980. "Compatibility Planning for Different Types of Outdoor Recreation and Natural Resources," *Tourism Planning and Development Issues*. Ed. Donald D. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 139-147.

Discusses five steps for a locality to follow to manage conflicting outdoor recreation activities: (1) determine physical and biological carrying capacity of site, (2) understand recreation activities and needs of participants, (3) define objectives of an outdoor recreation experience, (4) establish outdoor recreation experience zones, and (5) set the carrying capacity in terms of maximum number of visitors to each zone.

- **Keywords:** Outdoor recreation, outdoor recreation planning, carrying capacity, compatibility planning, outdoor recreation experience.
- 75. Mathieson, Alister, and Geoffrey Wall. 1982. Tourism: Economic, Physical, and Social Impacts. London: Longman Group, 208 pp.

Illuminates the array of effects and problems resulting from modern tourism. Presents recent research on many tourism issues from worldwide case studies. Contents include conceptualization of tourism, motivations for travel, and economic, physical, social, and cultural effects.

- Keywords: Motivations for travel, carrying capacity, multipliers, economic impacts, environmental impacts, social impacts, cultural impacts, worldwide studies.
- 76. Romeril, Michael. 1989. "Tourism and the Environment: Accord or Discord?" *Tourism Management* 10(3), pp. 204-208.

Gives examples of worldwide negative effects of tourism on the environment and suggests ways to promote tourism that protect the environment. These include careful management of the tourist, promotion of conservation-based nature or "green" tourism, and control of the tourist flow to avoid exceeding the carrying capacity during peak seasons.

- Keywords: Environmental impacts, tourist flows, carrying capacity, peak seasons, nature tourism, green tourism, worldwide studies.
- 77. Shelby, Bo, and Thomas A. Heberlein. 1986. Carrying Capacity in Recreation Settings. Corvallis, OR: Oregon State Univ. Press, 164 pp.

Reviews origin of the term "carrying capacity," which came from biology and, in the social sciences, was first applied to wilderness area use. Defines carrying capacity as the "number of users that can be accommodated by a given area without loss in the quality of the natural environment and/or the visitor experience." Discusses the use of carrying capacity in recreation settings, which is subjective and involves value judgment.

Keywords: Outdoor recreation, wilderness areas, carrying capacity.

Tourism Development: Theories, Plans, and Policies

Tourism as a rural economic development tool has received much attention in recent years. This section presents studies on the theories, plans, and policies of tourism development. These studies assert that tourism is a viable development tool and tell how to achieve successful tourism development.

A successful rural tourism project requires a three-step process: planning, development, and promotion. Blank (79), Haywood (87), Thibal (98), and the University of Missouri (99) focus on the overall process.

The first task of the planning step is assessing an area's tourism resources and potential. Gunn (86) presents a computer mapping method of such assessment. Stephen L.J. Smith (97) presents a method of indexing tourism resources in an area and applies this method to the Province of Ontario, Canada. Lovingood and Mitchell (89) replicate this method in South Carolina.

Developing the tourism product is the next step in the process. Browne and Nolan (81) and Wiener (100) focus on this step and consider cultural resources as a tourism product. The third step in the process is promoting or marketing the tourism product. Gilbert (85) focuses entirely on marketing rural tourism.

78. Allen, Lawrence R., Patrick T. Long, Richard R. Perdue, and Scott R. Kieselbach. 1988. "The Impact of Tourism Development on Residents' Perceptions of Community Life," *Journal of Travel Research* 27(1), pp. 16-21.

Reports on a 1985 survey of 20 rural Colorado communities that attempts to determine the relationship between tourism development and the residents' view of community life. Uses canonical analysis to determine which dimensions of community life are most sensitive to tourism development. Studies seven dimensions: public services, economics, environment, medical services, citizen involvement, formal education, and recreation services. Finds that citizen involvement, public services, and the environment are most sensitive to tourism development and that the relationship between such development and the dimensions of community life are generally nonlinear.

Keywords: Tourism development, dimensions of community life, canonical analysis, rural communities, Colorado.

79. Blank, Uel. 1985. The Community Tourism Industry Imperative: The Necessity, the Opportunities, Its Potential. State College, PA: Venture Publishing, 200 pp.

Introduces all aspects of tourism, from defining tourism and economic development to developing local level tourism policies. Contents include tourism and economic development, tourist destination areas, economic limits to tourism development, linkages between the tourism industry and the local economy, community tourism resource management, tourism marketing, and tourism development policy.

Keywords: Carrying capacity, tourism development, linkages, multipliers, input-output analysis, export base theory, sector theory of community development, quality of living theory, tourism resources, tourism policy.

80. Blatt, Dana, and Derrick Crandall. 1988. "Americans Outdoors: Resources for the Future," Land Use Policy 5(3), pp. 269-272.

Reports the recommendations made by the President's Commission on Americans Outdoors, begun in 1985. Recommends that the public sector form partnerships with private for-profit and not-for-profit entities to enhance recreation services and resources, consider private investments in public recreation areas, shape the future growth of an area while planning the area, develop "greenways" (corridors of recreation lands and waters near populated places), and consider incentives to encourage private landowners to increase public access to their lands. Recommends that private landowners recognize the opportunity to provide recreation services to the public and organize into groups to assist governments in managing the use of private lands.

Keywords: President's Commission on Americans Outdoors, greenways.

81. Browne, Rita-Jean, and Mary Lee Nolan. 1989. "Western Indian Reservation Tourism Development," Annals of Tourism Research 16(3), pp. 360-376.

Discusses the status of tourism development on Indian reservations in the Western United States, using data from previous research and from questionnaires mailed to tribal managers and councils. Finds that tourism is a viable economic development tool for some reservations, especially large and/or scenic reservations near national monuments or parks. Concludes that tribal control of tourism development is advantageous because tribal control becomes a force for cultural revitalization, it maintains cultural identity, it increases understanding of Indian culture, and it increases self-esteem, self-determination, and the economic independence of the tribe.

Keywords: Tourism development, Indian reservations, tribal control, cultural resources.

82. Cordell, H. Ken, Robert W. McLellan, and Michael H. Legg. 1980. "Managing Private Rural Land as a Visual Resource," *Tourism Planning and Development Issues*. Ed. Donald E. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 87-97.

Builds a case against small-scale recreational and tourist enterprises in rural areas. Advocates strategies that emphasize the beauty and rusticness of rural lands and claims that rural lands are best used as visual resources.

Keywords: Rural preservation, rural tourism, visual resource.

83. Economics Research Associates, the University of Missouri, and the United States Travel Data Center. 1989. National Policy Study on Rural Tourism and Small Business Development. U.S. Dept. of Commerce, United States Travel and Tourism Admin., 18 pp.

Summarizes the findings of a study conducted by the U.S. Department of Commerce's United States Travel and Tourism Administration (USTTA) between April and September of 1989. Discusses how small businesses in rural areas can be promoted through travel and tourism. Believes a Federal policy on rural tourism and Federal implementation of such a policy are needed.

Keywords: Rural economic development, USTTA, tourism policy, Federal policy, small business development, rural tourism.

84. Edgell, David L., Sr. 1990. Charting a Course For International Tourism In the Nineties: An Agenda for Managers and Executives. U.S. Dept. of Commerce, United States Travel and Tourism Admin. and Econ. Dev. Admin., 55 pp.

Provides a concise overview of international tourism, including its definition, effects, and the major organizations involved with promotion. Contents include international tourism as a commercial and economic activity, political and foreign policy implications of international tourism, sociocultural and environmental aspects of international tourism, and projections of international tourism through the year 2000.

Keywords: International tourism, multipliers, invisible export, rural tourism, tourism development, projections, Federal policy.

85. Gilbert, David. 1989. "Rural Tourism and Marketing," Tourism Management 10(1), pp. 39-50.

Defines rural tourism and marketing theory, which is much more than promotion and advertising. Describes how rural tourism development can benefit from proper marketing. Says development must maximize the general community welfare, which includes protecting the countryside and the environment, which is often the rural tourism product.

Keywords: Rural tourism, tourism product, tourism development, marketing.

86. Gunn, Clare A. 1980. "An Approach to Regional Assessment of Tourism Development Potential," *Tourism Planning and Development Issues*. Ed. Donald D. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 261-276.

Explains a computer mapping method that assesses the tourism potential of an area in south-central Texas. Various features of an area, such as physical attributes, tourist destinations, tourist attractions, and services, are mapped. Explains how computer maps can be used to help a locality develop its tourism product.

Keywords: Tourism potential, tourism development, computer mapping, tourism product, Texas.

87. Haywood, Michael K. 1988. "Responsible and Responsive Tourism Planning in the Community," *Tourism Management* 9(2), pp. 105-118.

Explores the constraints to community involvement in tourism planning and describes a diversified approach to tourism planning that involves the community. Explains scenario writing, which deals with both facts and perceptions, and the use of scenario writing as a tool to help develop a community's tourism goals. Lists goals of community tourism planning as identifying possibilities and choices about future of local tourism, examining each possibility in terms of its probable effects, and including the preferences of the community's residents in the tourism planning process.

Keywords: Tourism planning, community cooperation, scenario writing, tourism goals.

88. Kieselbach, Scott R., and Patrick T. Long. 1990. "Tourism and the Rural Revitalization Movement," *Parks and Recreation* 25(3), pp. 62-66.

Gives overview of the importance of tourism to rural revitalization efforts. Touches upon creative approaches to diversification of rural economies, rural community tourism needs, entrepreneurship and small business development, the National Policy Study conducted by the United States Travel and Tourism Administration (USTTA), the Rural Partnership Act of 1989, and the Colorado Rural Revitalization Program.

Keywords: Rural tourism, entrepreneurship, USTTA, National Policy Study, Rural Partnership Act, Colorado Rural Revitalization Program, Colorado.

89. Lovingood, Paul E., Jr., and Lisle E. Mitchell. 1989. "A Regional Analysis of South Carolina Tourism," Annals of Tourism Research (16)3, pp. 301-317.

Replicates methodology developed by Stephen L.J. Smith (97) and applies it to South Carolina's tourism resources. Formulates four tourism indexes: urban recreation, amenities rich; urban recreation, tourism; boating, fishing, and camping; and outdoor recreation, nature-oriented. From the four indexes, develops six types of county clusters, which describe the basic structure of tourism resources in the State. Compares the pattern of the county clusters with four measures of economic importance of tourism to illustrate the significance of tourism in each county and in the State. Says Smith's methodology works well in South Carolina and may be a valuable planning tool elsewhere.

Keywords: Tourism resources, tourism indexes, tourism regions, regional analysis, South Carolina.

90. Mangun, William R., and John B. Loomis. 1987. "An Economic Analysis of Funding Alternatives for Outdoor Recreation in the United States," *Policy Studies Review* 7(2), pp. 421-431.

Discusses the history of Federal funding of outdoor recreation that resulted in the Land and Water Conservation Fund Act of 1965. Also, describes the findings of the President's Commission on Americans Outdoors, which state that (1) more money for recreation is needed, (2) Americans are willing to pay more for recreation, (3) present and potential funding sources exist, (4) some States and localities have developed innovative fundraising techniques, and (5) wide support for some Federal-level funding exists.

Keywords: Land and Water Conservation Fund Act, President's Commission on Americans Outdoors, funding, Federal policy.

91. Messerli, Hannah R. 1990. Enterprise Zones and Rural Tourism Development: Policy Issues and Options. U.S. Dept. of Commerce, 41 pp.

Describes enterprise zones and reviews their legislative history in the United States. Introduces the idea of establishing enterprise zones in rural areas to help develop tourism. Outlines success factors for development of a Federal rural tourism enterprise zone program. These factors include acknowledging rural tourism development as a legitimate economic development tool, establishing a Federal commitment, and using rural tourism enterprise zones as a tool for regional land use planning. Also, cautions that such development may not work in all rural areas.

Keywords: Rural tourism, enterprise zones, tourism development, Federal policy.

92. Richter, Linda K. 1985. "State-Sponsored Tourism: A Growth Field for Public Administration?" Public Administration Review 45(6), pp. 832-839.

Explores the growth of public sector tourism development by reporting the findings of a 1984 survey of State and territorial tourism and travel offices. Survey asked about the offices' budgets, personnel needs,

intergovernmental relations, and political support. Finds tourism is generating important State revenues, but there is little monitoring of tourism growth and little interest in hiring people with monitoring skills.

Keywords: State travel and tourism offices, survey, tourism development.

93. Ronkainen, Ilkka A., and Richard J. Farano. 1987. "United States' Travel and Tourism Policy," *Journal of Travel Research* 25(4) pp. 2-8.

Summarizes current Federal Government policy on tourism and travel. Describes the roles of Congress and the United States Travel and Tourism Administration (USTTA) of the U.S. Department of Commerce. Suggests ways to increase the competitive position of the United States in the world tourism market.

Keywords: Tourism policy, Congress, USTTA, Federal policy.

94. Sem, John, ed. 1989. Using Tourism and Travel as a Community and Rural Revitalization Strategy. Proceedings of the National Extension Workshop. St. Paul, MN: Minnesota Extension Service, Univ. of Minnesota, 215 pp.

Documents ideas and resources that small rural communities can use in developing tourism, including expanding businesses and services for travelers. Contents include role of the Extension Service in tourism, strategies for rural communities to foster tourism, data sources, planning for tourism, tourism marketing, developing bed and breakfasts, and developing community festivals.

Keywords: Strategy, Extension Service, bed and breakfasts, festivals, marketing.

95. Siehl, George H. 1990. Amenity Resources and Rural Economic Growth: Report on a National Policy Symposium. Congressional Research Service, The Library of Congress, 92 pp.

Presents the policy recommendations from a symposium titled "Enhancing Rural Economies Through Amenity Resources," held at Pennsylvania State University, May 2-5, 1990. Defines amenity resources as "those aspects of the rural environment in which residents and visitors may find beauty, pleasure, and experiences that are unique to their locales." Concludes that amenity resources present credible economic development opportunities in many, but not all, rural communities. Says a new Federal program is not needed to develop the opportunities, but better dissemination of information about existing programs is needed.

Keywords: Amenities, rural economic development, tourism policy, Federal policy.

96. Smith, K. 1990. "Tourism and Climate Change," Land Use Policy 7(2), pp. 176-180.

Describes possible effects of global warming on tourist areas, especially beaches and ski resorts. Discusses how tourism planners and policymakers should be planning now for changes caused by global warming.

Keywords: Tourism planning, tourism policy, global warming.

97. Smith, Stephen L.J. 1987. "Regional Analysis of Tourism Resources," Annals of Tourism Research 14(2), pp. 254-273.

Describes a procedure for defining tourism regions on the basis of county-level resource patterns, such as the number of private cottages, campsites, marinas, and other tourism resources. Uses the Province of Ontario, Canada, as a case study. Identifies four basic tourism indexes: urban tourism, outdoor recreation, cottaging/boating, and urban fringe tourism. Shows how these four indexes empirically give rise to six clusters or types of counties. Relates the clusters' tourism resource patterns to two measures of economic importance of tourism. Finds that urban tourism is the most significant determinant of total county tourism receipts and that cottaging/boating are the most important determinant of the relative local magnitude of tourism as an industry.

Keywords: Tourism resources, tourism indexes, tourism regions, regional analysis, Ontario, Canada.

98. Thibal, Suzanne. 1988. Rural Tourism in Europe. European Campaign for the Countryside Study No. 2. Strasbourg: Council of Europe, 38 pp.

Defines rural tourism and describes effective strategies for rural revitalization in Europe. Discusses history of rural tourism, which has always involved providing accommodations for travelers from elsewhere. Partial contents include rural tourism products, clienteles, costs and benefits, limits to development, a return to Europe's origins, a contribution to peace, survey of rural tourist accommodations, local tourist development plans, and proposals for developing tourism in rural Europe.

Keywords: Europe, rural tourism, tourism product, accommodations, development plans, tourism development.

99. The University of Missouri. 1986. *Tourism U.S.A.* U.S. Dept. of Commerce and the United States Travel Service, 227 pp.

Presents procedures for communities to follow to develop tourism as part of their overall economic development plan. Contents include appraising the tourism potential, planning for tourism, assessing the tourism product and the market, marketing tourism, visitor services, and sources of assistance for tourism development.

Keywords: Local benefits, local liabilities, tourism development, community leadership, survey, multipliers, costbenefit analysis, market analysis, tourism promotion, tourism product, visitor services.

100. Wiener, Louise W. 1980. "Cultural Resources: An Old Asset--A New Market for Tourism," *Journal of Cultural Economics* 4(1), pp. 1-7.

Discusses the lack of emphasis on cultural resources in tourism in the United States. Gives examples of the pervasiveness of the U.S. culture in the world and suggests ways to incorporate cultural tourism into the U.S. tourism product. Suggests role for the United States Travel and Tourism Administration (USTTA) to play in achieving this.

Keywords: Cultural tourism, cultural resources, tourism product, USTTA, Federal policy.

Rural Tourism Development: Case Studies

This section presents annotations of specific tourism development efforts. The theories and process of such development presented in the previous section are shown in practice here. The case studies describe both individual community efforts and regional efforts at rural tourism development.

Some of the case studies suggest that local community-level development efforts may not be effective and that regional efforts may be better. Roehl and others (109) note that individual communities are often adversarial in their approaches to tourism development and that individual communities often have incomplete information about a region's tourism products. The authors show how a regional approach is more effective in their case study of charter boat fishing along the Texas coast.

Smith and others (111) also address the advantages of a regional approach to rural tourism development. Noting that the individual communities lacked the resources to develop tourism, the authors describe a successful regional tourism development effort in northeastern California.

Other studies also analyze the benefits of regional efforts. Taylor and others (113) describe the success of the Big Horn Marketing Area of northeastern Wyoming, and Murphy (107) describes both individual community and regional efforts in British Columbia, Canada.

101. Chon, Kye-Sung, and Michael R. Evans. 1989. "Tourism in a Rural Area--A Coal Mining-County Experience," *Tourism Management* 10(4), pp. 315-321.

Describes the content analysis approach to tourism development used by Wise County, Virginia. Explains the steps of content analysis, which are profiling tourism resources, surveying county visitors to determine their likes and dislikes of the county, analyzing survey results, surveying community leaders, and applying the results of surveys. Describes actions then taken by Wise County, including correcting negative aspects of the county by improving the roads and cleaning up the litter, planning feasibility studies of potential tourism attractions, designing tourism marketing plans, and launching a countywide tourism awareness program.

Keywords: Rural tourism, tourism development, situation analysis, community inventory, Wise County, Virginia.

102. Flora, Jan L., James J. Chriss, Eddie Gale, Gary P. Green, Frederick E. Schmidt, and Cornelia Flora. 1991. From the Grassroots: Profiles of 103 Rural Self-Development Projects. Staff Report No. AGES-9123. U.S. Dept. of Agriculture, Econ. Res. Serv., 109 pp.

Provides information on 103 various rural self-development projects in the United States for community leaders and development professionals. Gives the name and address of the project, type of project, level of local involvement, and a brief description of the project. Forty of the projects are tourism development projects.

Keywords: Self-development, rural tourism.

103. Fritz, Richard G. 1982. "Tourism, Vacation Home Development and Residential Tax Burden: A Case Study of the Local Finances of 240 Vermont Towns," *American Journal of Economics and Sociology* 41(4), pp. 375-385.

Discusses the assumption that tourism development is generally good for localities. Tests this assumption by studying the effect of vacation homes on local tax bases in 240 Vermont towns by using a tax divergence model, regression analysis, and analysis of variance. Finds that vacation home development often increases residential property taxes, especially in the more rural, remote areas.

Keywords: Tourism development, vacation homes, residential property taxes, tax divergence model, regression analysis, analysis of variance, Vermont.

104. Henning, Steven A. 1990. Measuring Leadership Perceptions of Recreation and Tourism Development in Rural Coastal Zones. Mississippi State Univ., Southern Rural Development Center, 75 pp.

Describes survey results of residents of two rural coastal parishes in Louisiana. Studies the perceived needs of the local community relative to the needs of commercial recreation and tourism and makes recommendations for promoting tourism. Finds that the local leadership groups believe that tourism development would benefit their parish, but they are concerned about funding such development. They are also concerned that the quality of recreation for local residents may decline because of tourism development.

Keywords: Survey, tourism development, tourism planning, community leadership, Louisiana.

105. Isserman, Andrew. 1987. "An Automated Quasi-Experimental Control Group Method with Statistical Significance Tests: The Method and Its Application to a Tourism Economic Development Project." Paper presented at North American Regional Science Association Meetings, Baltimore, MD, Nov. 6, 1987. Morgantown, WV: Regional Research Institute, Research Paper 8714, 15 pp.

Presents an application of the quasi-experimental control group method of research on a large-scale tourism development project begun in 1968 in Summers County, West Virginia. Selects a control group of counties similar to Summers County and compares them with Summers County over time to estimate the effects of the development project. Estimates that the project led to sustained annual income growth of 10-20 percent in the county, especially in the industries of State and local government, finance, insurance and real estate, and construction. Shows little spread of growth from the tourist project to the retail trade or services sectors in the county, supporting the idea that large tourist facilities are often self-sufficient and do not help the local economy grow and develop.

- Keywords: Quasi-experimental control group method, tourism development, income impacts, Summers County, West Virginia.
- 106. Moulin, Claude Lucette. 1980. "Plan for Ecological and Cultural Tourism Involving Participation of Local Population and Associations," *Tourism Planning and Development Issues*. Ed. Donald D. Hawkins, Elwood L. Shafer, and James M. Rovelstad. Washington, DC: George Washington Univ. Press, pp. 199-211.

Describes France's approach to developing rural tourism, which emphasizes close contact between hosts and guests. Describes history of such development and the planning process required for successful rural tourism development. Gives goals of ecological and cultural tourism, which are the development of economic and social factors, conservation and planning, reinforcement of traditional agriculture, and enhancement of natural resources and amenities. Feels that this approach is applicable to North America.

Keywords: Rural tourism, ecological tourism, cultural tourism, natural resources, amenities, France.

107. Murphy, Peter E. 1988. "Community Driven Tourism Planning," Tourism Management 9(2), pp. 96-104.

Gives examples of effective tourism planning in communities in British Columbia, Canada. Shows how communities and the tourist industry have worked together in several British Columbia communities: Victoria, the Shuswap Lake region, Kamloops, and the Comox Valley. Explains the workshop approach to tourism planning used by these communities.

Keywords: Community cooperation, workshop approach, tourism planning, British Columbia, Canada.

108. Murphy, Peter E., and Betty Andressen. 1988. "Tourism Development on Vancouver Island: An Assessment of the Core-Periphery Model," *The Professional Geographer* 40(1), pp. 32-42.

Examines tourism on Vancouver Island, British Columbia, using the core-periphery model of regional planning, which says that development will occur in periphery areas to the extent that core areas allow it and periphery areas want it. The model is thought to work well with tourism development because tourism can reverse the traditional flow of income and employment from peripheries to cores. Finds that the periphery should not be viewed as one homogeneous region. By using discriminant analysis on the periphery areas of Vancouver Island, finds that periphery residents, who are expected to welcome tourism, have differing opinions of it, possibly based on differing community aspirations.

Keywords: Core-periphery model, discriminant analysis, Vancouver Island, British Columbia, Canada.

109. Roehl, Wesley S., Robert B. Ditton, and Daniel R. Fesenmaier. 1989. "Community-Tourism Ties," Annals of Tourism Research 16(4), pp. 504-513.

Examines the degree of interdependence between community information sources and the tourism industry by studying charter boat fishing operators along the Texas gulf coast. Notes that the relationships between communities and tourism attractions are often competitive and adversarial and that lack of information on attractions is prevalent. Suggests an areawide tourism information strategy to improve attractiveness and use of the charter boat industry.

Keywords: Tourism development, community cooperation, Texas, sport fishing.

110. Schweke, Tim, Dave Sprehn, Sue Hamilton, and Jack Gray. 1989. A Look at Visitors on Wisconsin's Elroy-Sparta Bike Trail. Madison, WI: Univ. of Wisconsin, Cooperative Extension Service, 54 pp.

Surveys the users of the Elroy-Sparta Bike Trail in Wisconsin during the summer of 1988 to develop a general profile of the trail users, including where they live, differences and similarities in trip behavior, and trip-related expenditures. Claims such information is useful to businesses near the trail and to agencies that promote this and other bike trails. Finds that the average per person expenditure is \$25.14, for a total of approximately

\$1,257,000 spent by trail users. Also, finds that nearly half the users lived outside of Wisconsin, and the largest single market area was Chicago.

Keywords: Elroy-Sparta Bike Trail, market areas, trip-related expenditures, areas of communication influence, Wisconsin.

111. Smith, Valene L., Arlene Hetherington, and Martha D.D. Brumbaugh. 1986. "California's Highway 89: A Regional Tourism Model," *Annals of Tourism Research* 13(3), pp. 415-433.

Documents the development of a regional tourism council and marketing plan for several small rural communities of northeastern California. Shows that the council was effective in developing local leadership, ongoing community participation, and increased revenues from tourism development.

Keywords: Tourism development, regional development, community cooperation, marketing, rural tourism, California.

112. Stokes, Samuel N., and Elizabeth Watson. 1989. Saving America's Countryside: A Guide to Rural Conservation. Baltimore, MD: The Johns Hopkins Univ. Press, 306 pp.

Explains a technique developed to analyze the features and amenities of rural areas. Also, explains how rural areas can conserve their unique features. Includes 28 case studies to illustrate its points. Contents include rural concerns, starting and managing a rural conservation program, analyzing a rural community, land protection techniques that local governments can use, techniques for protecting private property, help from outside the local community, and community education. Includes appendixes of Federal agencies and private nonprofit organizations that work in rural conservation and tourism.

Keywords: Rural tourism, rural preservation, community inventory, comprehensive plan, zoning, subdivisions, land use regulations, easements, National Environmental Policy Act, Clean Air Act, Clean Water Act, Federal policy.

113. Taylor, David T., Robert R. Fletcher, and Trish Clabaugh. 1990. Tourism in the Big Horns: A Profile of Visitors, Attractions, and Economic Impacts. Study conducted by Cooperative Extension Service, University of Wyoming, and Washakie County. Laramie, WY: Univ. of Wyoming, 123 pp.

Surveys visitors to the Big Horn Marketing Area of northeast Wyoming in 1989 and 1990. Studies secondary data sources to inventory attractions, accommodations, and trends in visitation to develop profiles of nonresident visitors and their trip characteristics and to estimate the economic effect of tourism on the area. Estimates that 256,442 traveling parties spent 892,710 person-nights in the area, spending \$34.6 million for a total economic effect of \$56.3 million. Estimates the following effects: creation of 727 full-time equivalent direct jobs, creation of 304 full-time equivalent indirect jobs, and the return of \$322,000 of direct sales tax revenue to local governments, as well as \$116,000 of indirect sales tax revenue.

Keywords: Survey, rural tourism, economic impacts, direct impacts, indirect impacts, Big Horn Marketing Area, Wyoming.

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U.S. Department of Agriculture Economic Research Service 1301 New York Avenue, N.W. Washington, DC 20005-4788